



# UNITED STATES PATENT AND TRADEMARK OFFICE

*mn*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,515	06/26/2003	Dustin Kirkland	AUS920030349US1	6018
35525 7590 07/19/2007 IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER LAFORGIA, CHRISTIAN A	
			ART UNIT 2131	PAPER NUMBER
			MAIL DATE 07/19/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/607,515	<b>Applicant(s)</b> KIRKLAND, DUSTIN	
	<b>Examiner</b> Christian La Forgia	<b>Art Unit</b> 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 12-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The amendment of 09 May 2007 has been noted and made of record.
2. Claims 1-9, 12-16, and 18-20 have been presented for examination.
3. Claims 10, 11, and 17 have been cancelled as per Applicant's request.

### ***Response to Arguments***

4. Applicant's arguments, see page 9, filed 09 May 2007, with respect to the drawings have been fully considered and are persuasive. The objection of the drawings has been withdrawn.
5. Applicant's arguments, see pages 9 and 10, filed 09 May 2007, with respect to the specification have been fully considered and are persuasive. The objection to the specification has been withdrawn.
6. Applicant's arguments, see page 10, filed 09 May 2007, with respect to the 112, 2<sup>nd</sup> rejection have been fully considered and are persuasive. The 112, 2<sup>nd</sup> rejection of claims 3, 4, 9, 13, 14, 16, and 18 has been withdrawn.
7. In response to the Applicant's arguments that Inoue does not disclose wherein the first and second wireless bridge devices have cable connectors for insertion of the networked communication device, the Examiner agrees that Inoue does not disclose with specificity the type of connection used between the communication device and the bridging device. The Examiner showed in rejecting claims 7 and 9-11 in the previous office action, through the use of **Newton's Telecom Dictionary**, that the use of wired connections between communication device and the wireless bridging devices, specifically the use of Ethernet, network interface cards and RJ45 connectors, is well known. The Applicant has challenged the Examiner's stance on what is known in the art, and the Examiner has, therefore, provided U.S. Patent No. 5,572,528 to Shuen,

Art Unit: 2131

hereinafter Shuen, as extrinsic evidence that wired connections between network devices and bridging devices is well-known. Shuen shows in figure 1 that network devices are connected to router 342 via carriers 304. Shuen describes these carriers as any physical cables or lines or wireless transmission, thereby showing that in the networking sense cables and wireless transmission are roughly equivalent. In addition to Shuen, U.S. Patent Application No. 2002/0198011 A1 to Simbirski shows in figure 1 a computer connected to a wireless router/modem via a wired connection communicating with another wireless router/modem via a wireless connection. Simbirski further describes this in paragraph 0003 of the disclosure, and admits that as of the filing in June of 2001 that such a system constitutes prior art.

8. Since prior art systems exist showing devices wired to a wireless device that communicates wirelessly with another wireless device connected via a cable to another communication device, the rejection is maintained.

9. If the Applicant challenges a factual assertion as not properly based upon common knowledge, the Examiner must support the finding with adequate evidence. The Examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2); see also *In re Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697. If the Examiner adds a reference in the subsequent Office action after applicant's rebuttal, and the newly cited reference is added only as directly corresponding to evidence to support the prior common knowledge finding, and it does not result in a new issue or constitute a new ground of rejection, the Office action may be made final. Since the inclusion of Shuen and Simbirski are only added to provide supporting evidence and do not result in a new issue or grounds of rejection the Office Action is made final.

Art Unit: 2131

10. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the references themselves provide a teaching suggestion and motivation. Furthermore, the Examiner has provided evidence, in the form of Shuen and Simbirski, that there is knowledge available to those of ordinary skill in the art that would provide knowledge of making the claimed invention.

11. See further rejections that follow.

***Claim Rejections - 35 USC § 103***

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. Claims 1-9, 12-16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,167,513 to Inoue et al., hereinafter Inoue, in view of U.S. 6,452,910 to Vij et al., hereinafter Vij.

14. As per claims 1, 8, and 15, Inoue teaches a data processing configuration, a method, and a bridge suitable for use in a data processing network, comprising:

a data processing system (Figures 3 [blocks 5a, 5b], 6 [blocks 2, 5a], 13 [blocks 23], 22 [blocks 2, 5a], 25 [blocks 2, 3 5a], 43 [blocks 2-1, 5a], column 20, lines 35-44, i.e. stationary or mobile node);

a network communication device of the data processing system for enabling the data processing system to communicate with a wired network, the communication device including a wired port for receiving a network cable connector (Figures 3 [blocks 1a, 1b], 6 [blocks 1a, 1b], 13 [blocks 1], 22 [blocks 1a, 1b], 25 [blocks 1a, 1b], i.e. the stationary or mobile computers connected to the gateways as illustrated);

a first bridge device having a cable connector for insertion in the wired port of the network communication device (Figures 6 [block 4a], 13 [block 4, GWa], 22 [block 4a], 25 [block 4a], 43 [block 4a]), wherein the first bridge device further includes an encryption unit for encrypting information received from the data processing system according to a predetermined encryption algorithm and a transmitter for transmitting the encrypted information (Figures 6, 13, 22, 25, 43, column 20, lines 35-44, i.e. GWa converts it into the encryption/end-to-end authentication format, encryption link format from GW0 (or GWa) to GW1 (or GWb)); and

a second bridge device having a cable connector for insertion into a port of the wired network (Figures 6 [block 4b], 13 [block 4, GWb], 22 [block 4b], 25 [block 4b], 43 [block 4b]), wherein the second bridge device includes a receiver for receiving encrypted information transmitted from the first bridge device, and a decryption unit for decrypting received encrypted information according to a decryption algorithm that is matched to the encryption algorithm of the first bridge device (Figures 6, 13, 22, 25, 43, column 20, lines 35-44, i.e. GWb converts the received encryption authentication format to IP format) wherein the first and second bridge devices communicate (column 13, lines 27-32, i.e. master key shared between the packet encryption gateways).

15. Inoue does not teach where the bridges communicate wirelessly.

Art Unit: 2131

16. Vij teaches wirelessly connecting a personal area network and a local area network (column 1, lines 7-14).

17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the bridges communicate wirelessly, since Vij states at column 2, lines 34-38 that using wireless bridges allows for the seamless integration of wireless network links while still being flexible to adapt to different wireless technologies (column 1, lines 66-67).

18. Regarding claims 2, 12, and 16, Inoue teaches wherein the encryption unit of the first bridge device is configured to format the encrypted information according to a protocol prior to transmitting the encrypted information (Figures 4D, 10-12, column 12, line 6 to column 13, line 20, column 20, lines 35-44, i.e. GWa converts it into the encryption/end-to-end authentication format, encryption link format from GW0 (or GWa) to GW1 (or GWb)) and wherein the decryption unit of the second wireless bridge device is configured to un-format the protocol prior to decrypting the received encrypted information (column 20, lines 35-44, i.e. GWb converts the received encryption authentication format to IP format).

19. With regards to claim 3, Inoue teaches first and second bridge devices and the Examiner takes Office Notice that each include an internal power supply for supplying power to the first and second bridge devices respectively, since without a power supply the bridging devices would not work.

Art Unit: 2131

20. With regards to claims 4, 14, and 18, Inoue teaches wherein the first wireless bridge device further includes means for receiving and decrypting information transmitted by the second wireless bridge device, and wherein the second wireless bridge device includes means for encrypting network packets and transmitting the encrypted packets (Figure 43, column 20, lines 35-44). Figure 43 illustrates that the steps disclosed at column 20, lines 35-44 can be reversed by showing the encryption link authentication format arrow going from GW1 to GW0.

21. Regarding claims 5 and 19, Inoue teaches wherein the encryption algorithm is based on an encryption key common to and embedded in the first and second bridge devices (column 13, lines 26-32).

22. With regards to claims 6 and 20, Vij teaches wherein the encryption key is at least 128 bits (column 11, lines 13-19).

23. Regarding claim 7, at least figures 6, 13, 22, 25, and 43 of Inoue clearly show the first (GW1 or GWa) and the second bridge (GW2 or GWb) networked to at least the stationary computer or the mobile computer or both. **Newton's Telecom Dictionary**, hereinafter Newton, states that Ethernet is a local area network standard used for connecting computers, printers, workstations, etc. Newton also states that the first personal computer with Ethernet capabilities was shipped by 3Com on 29 September 1982. Newton states that network interface cards are solely used to connect a workstation to a LAN. Finally, Newton discloses that to connect to a local area network one must use a twisted pair RJ-45 cable. Therefore, since Inoue illustrates the



Art Unit: 2131

gateways networked to computers, he discloses wherein the first and second bridge device connectors are RJ-45 compliant connectors and wherein the network communication device comprises an Ethernet compliant network interface card of the data processing device.

24. Regarding claim 9, Inoue teaches wherein the first bridge device is configured to connect to a network interface card (NIC) of a data processing system (figures 6, 13, 22, 25, and 43) by showing that the gateways are networked to the computers disclosed in Inoue. As discussed above, the sole purpose of a network interface card is to connect a workstation to a local area network.

25. With regards to claim 13, Vij teaches wherein the wireless protocol is selected from an IEEE 802.11 protocol and a short range wireless protocol (column 2, lines 11-14).

### ***Conclusion***

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

27. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2131

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792.


The examiner can normally be reached on Monday thru Thursday 7-5.

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christian LaForgia  
Patent Examiner  
Art Unit 2131

clf

  
**AYAZ SHEIKH**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**